Application No. 10/540,956
Paper Dated: September 27, 2007
In Response to the Office Action dated June 27, 2007
Attorney Docket No. 4544-051956

AMENDMENTS TO THE DRAWINGS

The attached drawing sheet includes changes to Figure 1. This figure has been amended to recite that Figure 1 is the sequence identified in the Specification and sequence listing as "SEQ ID NO. 1."

Attachments: Replacement Sheet (1)

Annotated Sheet (1)

REMARKS

Claims 35-45 are pending in the instant Application and have been examined on their merits. Claims 1-34 have been previously canceled. In response to the Office Action mailed on June 27, 2007, Applicants submit this Amendment. This Amendment amends claims 35-43 and Fig. 1. Claims 44 and 45 have been amended by virtue of their dependencies on amended claims. No new matter has been added by these amendments. In view of this Amendment and the remarks submitted below, Applicants respectfully request that the objections and rejections asserted in the Office Action be reconsidered and withdrawn, and that a Notice of Allowance be issued directed to all pending claims.

The Office Action asserts several grounds for objecting to the Application and rejecting the claims. The objections and rejections include: an objection to the drawing; a rejection under 35 U.S.C § 101, rejections under 35 U.S.C § 112, second paragraph; and a rejection under 35 U.S.C § 103.

Objection to the Drawings

The Office Action asserts an objection to Figure 1. Applicants have amended Figure 1 to further recite that Figure 1 is the sequence identified in the Specification and sequence listing as "SEQ ID NO. 1." Accordingly, Applicants respectfully request that this objection be withdrawn.

Rejections under 35 U.S.C. § 101

Claims 43-45 have been rejected under 35 U.S.C. § 101 as purportedly reciting non-statutory subject matter. Applicants have adopted the Examiner's suggestion and amended claim 43, and claims 44 and 45 *vis-à-vis* the amendment to claim 43, to recite "wherein the seeds comprise the polynucleotide sequence." Accordingly, Applicants respectfully request that this rejection be withdrawn.

Rejection under 35 U.S.C. § 112, Second Paragraph, Indefiniteness

Claims 35-45 have been rejected under 35 U.S.C. § 112, second paragraph, as purportedly being indefinite for failing to particularly point-out and distinctly claim the subject matter that Applicants regard as the invention. Particularly, the Office Action asserts that claim 35 is missing an essential step – expressing the polynucleotide sequence of SEQ ID NO:1.

Application No. 10/540,956

Paper Dated: September 27, 2007

In Response to the Office Action dated June 27, 2007

Attorney Docket No. 4544-051956

Applicants have amended claim 35, and thus have amended claims 36-45, which depend from claim 35, to recite "... expressing the polynucleotide sequence or the variant thereof" Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claims 37-42 have been rejected under 35 U.S.C. § 112, second paragraph, as purportedly being indefinite in their recitation of "increased." Applicants have adopted the Examiner's suggestion and amended claims 37-42 to recite "... relative to an untransformed plant of the same plant species." Accordingly, Applicants respectfully request that this rejection be withdrawn.

Rejection under 35 U.S.C. § 103

Claims 35-45 have been rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Mukhopadhyay *et al.* (NCBI/EMBL Database, Sequence Accession No. AF140722, June 7, 2000) in view of Hiei *et al.* (The Plant Journal (1994), 6:271-282) in further view of Liu *et al.* (Eur. J. Biochem. (1999), 262:247-257). Applicants respectfully traverse this rejection because the combination of the cited references is improper since (1) Mukhopadhyay does not teach or suggest that Mukhopadhyay's disclosed gene is a transcription factor, and (2) Liu does not teach or suggest that AN1/A20 type zinc-finger proteins are involved in stress tolerance.

A rejection under Section 103 must be supported by some reason for a skilled artisan to combine the elements in the same manner as the applicant. *KSR Int'l v. Teleflex*, 82 U.S.P.Q.2d 1385, 1397 (U.S. 2007). The reason or motivation cited cannot be based on hindsight. MPEP § 2145.

In this case, there is no motivation to combine Mukhopadhyay with Liu. Mukhopadhyay only discloses a gene, and makes no mention that the gene is a transcription factor. It only discloses that the gene is "a novel pathogenesis-related protein gene (OSPR) from rice." One skilled in the art would not necessarily recognize that a novel pathogenesis-related gene is a transcription factor because not all stress-tolerance related genes are transcription factors. Therefore, one skilled in the art would see no reason to combine Liu, which is directed to transcription factor genes used for manipulating plants, with Mukhopadhyay because one skilled in the art would not recognize that Mukhopadhyay is a transcription factor gene.

Application No. 10/540,956

Paper Dated: September 27, 2007

In Response to the Office Action dated June 27, 2007

Attorney Docket No. 4544-051956

In additional, Liu does not teach or suggest that an AN1/A20 type zinc-finger gene would be involved in stress tolerance. Not all zinc-finger proteins are transcription factors, nor are all zinc-finger genes related to stress tolerance. In fact, the claimed invention is the first AN1/A20 type zinc-finger gene linked to stress tolerance. In contrast, Liu describes five classes of zinc-finger transcription factors, none of which are AN1/A20 type zinc finger proteins.

In light of the array of transcription factor genes and other genes that are involved in stress tolerance, the claimed invention is patentable over the cited references because it is the first to identify the specific SAP1 (AN1 and A20 type) zinc-finger gene that is involved in stress tolerance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that all pending claims in the instant application are patentable over the cited references and are in condition for allowance. Accordingly, reconsideration and withdrawal of the rejections and objections, and a Notice of Allowance are respectfully requested.

Should the Examiner have any questions or concerns, the Examiner is invited to contact Applicants undersigned attorney by telephone at 412-471-8815.

Respectfully submitted,

THE WEBB LAW FIRM

1/1/1/1/

William H. Logsdon Registration No. 22,132

Attorney for Applicants 700 Koppers Building

436 Seventh Avenue

Pittsburgh, Pennsylvania 15219

Telephone: 412-471-8815 Facsimile: 412-471-4094

E-mail: webblaw@webblaw.com

OCT 0 1 2007

Application No.: 10/540,956

Title: "Novel Gene Osisap1 of Rice Confers Tolerance to Stresses and a Method Thereof"

Inventors: Kumar Akhilesh TYAGI et al. Attorney Docket No.: 4544-051956 Annotated Sheet

1/9

PCT/IN2003/000397

SEO ID NO. 1

O 2004/058963

Figure 1